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To
Subject Kalamazoo Meeting Materials

US EPA RECORDS CENTER REGION 5



407114

As promised, attached are support materials for the meeting on Monday. A few notes:

- The TCL/TAL table summarizes analytical results for soil and sediment samples collected from the Former Plainwell Impoundment. The message here is that, but for the PCBs, this material would not have to be landfilled.
- I have attached lab reports and a summary of the PCB analytical data for the influent to the groundwater treatment plant. Message is that for the past 18 months the water collected has been tested and PCBs have not been detected.
- The figures are self-explanatory.

I can be reached on my cell (312.286.8821) at any time over the weekend.

<<Allied OU TCL_TAL (2).pdf>> <<00473131 MillenniumAlliedPaperTreatment Plant Summary.pdf>>
<<Lab Inf Sample Rpt_Oct05 thru Mar07.pdf>>

<<64524W03.pdf>> <<64524A11 A-1_1.pdf>> <<64524A22 A-2_2.pdf>> <<64524T01.pdf>>
<<64524T02.pdf>>

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64524A22 A-2_2.pdf



64524T01.pdf

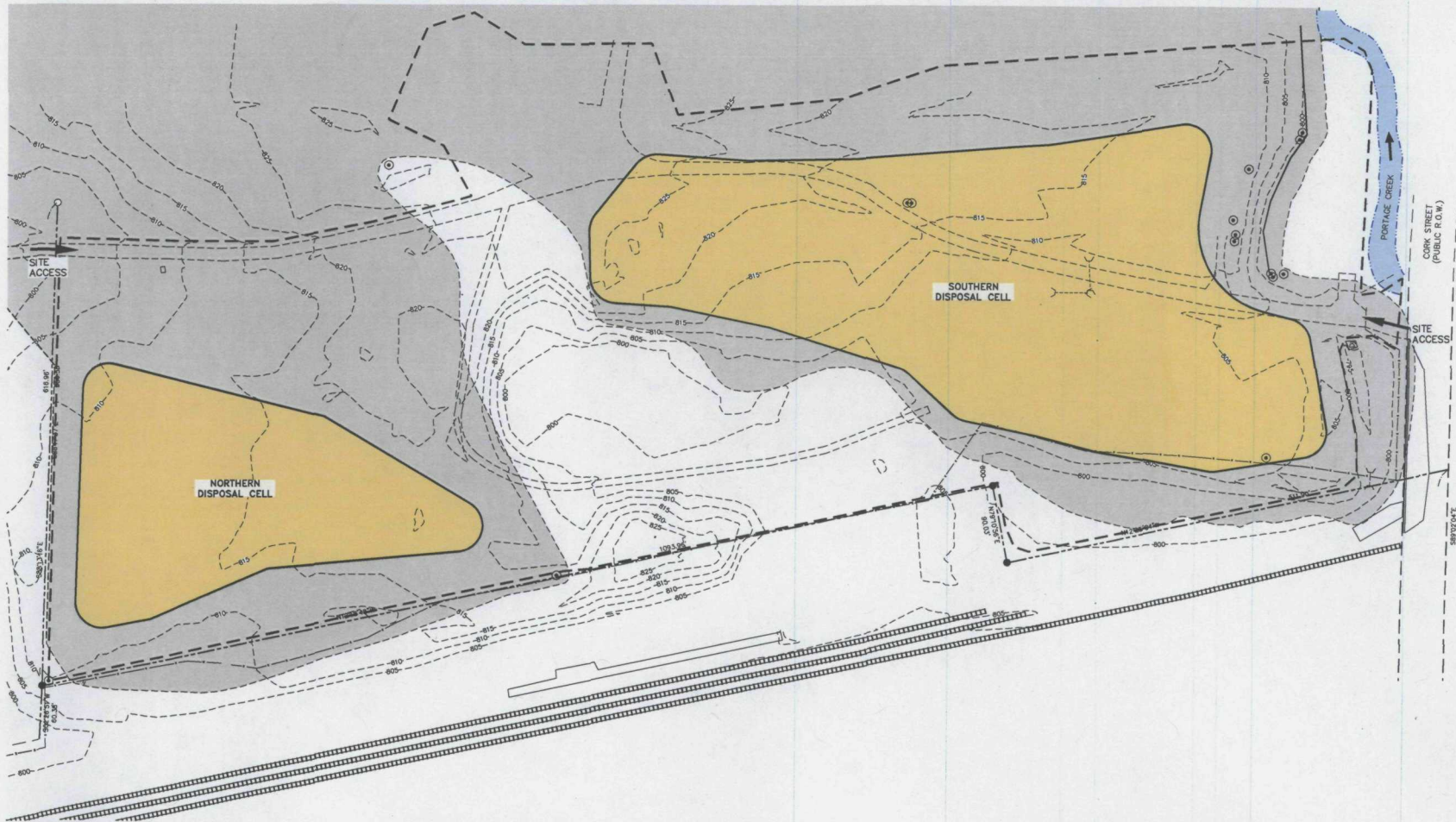


64524T02.pdf

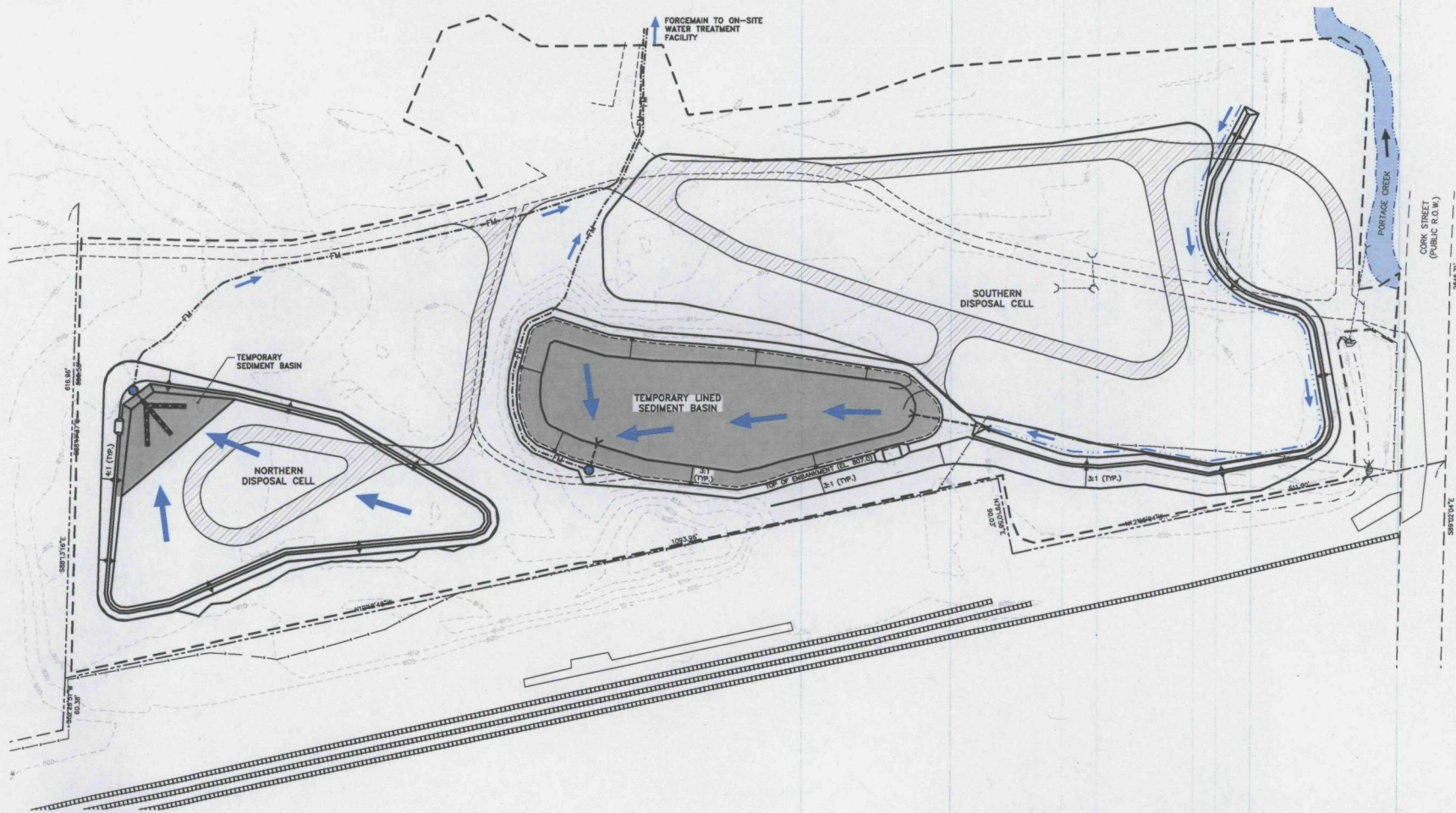
WATER TABLE CONTOUR MAP JUNE 19, 2003



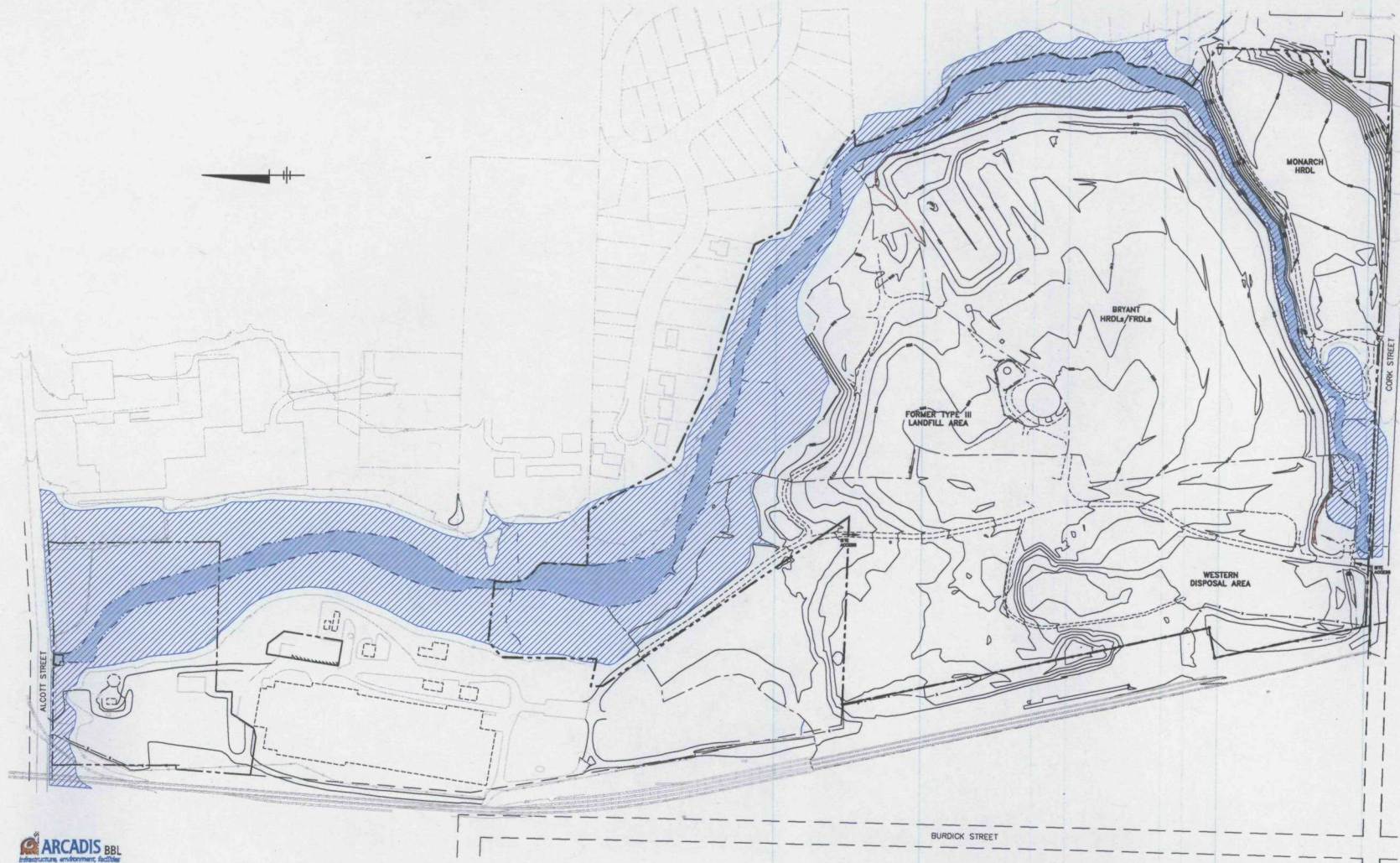
EXISTING SITE PLAN AND PROPOSED WORK LIMITS



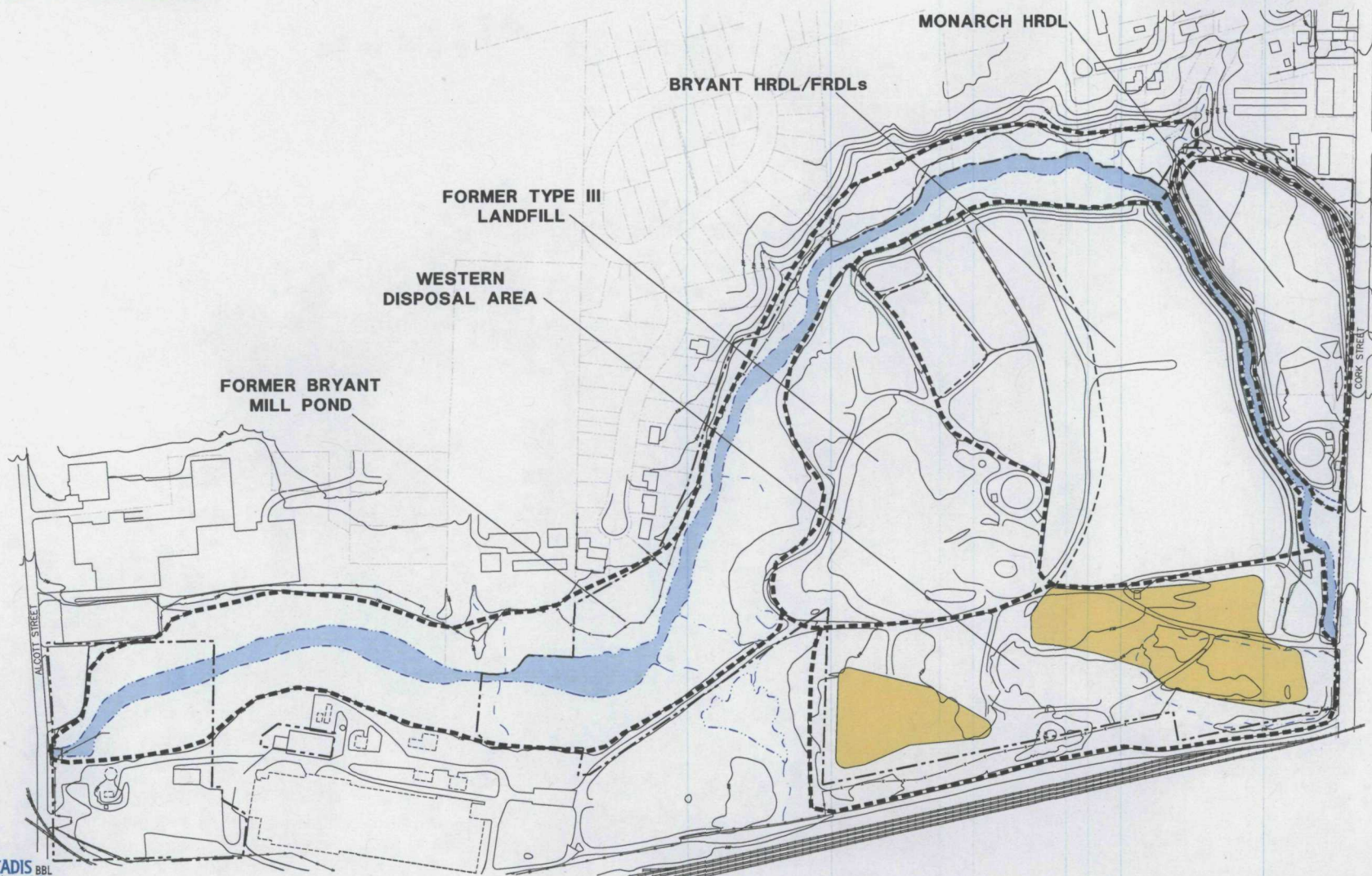
SITE PREPARATION AND DRAINAGE PLAN



APPROXIMATE 100 YEAR FLOOD PLAIN



STUDY AREAS



OU1 Design Issues

- The calculations behind the geotech stability of the existing material where the Plainwell material will be placed were not provided.

- Even though the Design Report represents final actions at this OU are to be dealt with during the FS and ROD execution, the interim cover needs to be designed to assure that newly placed residuals will be prevented from any release to the environment. This is true for not only the off-seasons during the active removal time but also for after all removal sediments and residuals have been placed before the remedial work begins due to the ROD.

- Based on current design, it appears non-contact storm water is not achievable (based on the permeable vegetated cover material selected and the outfall points look to be over existing residual areas). Easiest fix is to treat all water accumulated in the basin.

- Regardless of contact or non-contact storm water scenario, liner system for sediment basin must be upgraded to composite, double-lined design (synthetic top liner and composite bottom liner) with leachate collection and removal system between the liners and above the top liner (rule 308 of part 115 rules references rule 423, Rule 423 says among other things that the LF will need to achieve technical standards of 40 CFR, 264.221). Additional detail include (bottom slope to minimize head on liner, sump design, pump design)

- If still designing to allow non-contact scenario, current gravity drain seems somewhat impossible at elevations identified. Again, liner system must be upgraded to composite, double-lined design. Outfalls will have to be repaired so storm water is not traveling over where historic residuals already exist.

WCS Issues

- on drawing WC1-1 the stop logs are 6" x 6" and the stop log channel is W8"x 10". It would be better to have the stop logs sized to fit the stop log channel.

- Report still lacks details on the hydraulic analyses for various flows up through the 200 year during each phase of construction (e.g. phase I cofferdam, Phase II cofferdam, and existing conditions). For example in D-1.1, what will the flood effect be during a 200 year event when the phase I cofferdam elevation is at 711' vs the current configuration where the powerhouse channel embankment is at roughly 708'? The calculations used to evaluate the effects of 100 and 200 year flows on the floodplains have not been provided and should be so we can evaluate compliance with the states floodplain statute.

- Need a plan for debris removal on the upstream side of the WCS. The 6' spacing will make a rather effective screen for capturing debris.

- We still do not see an analysis that the sheeting won't fail due to failure from seepage pressures. It appears that the factor of safety was not calculated but can be using the submerged unit weight of the soil at any point divided by the total excess hydrostatic

pressure at that point. Points that should be checked include the bottom of the sheeting and various points along the wall.

- These design parameters may not be conservative enough to reasonably protect the structure from catastrophic failure, if exposed to expected conditions. It is not unreasonable to expect large ice flows to occur. The structure should be designed to handle such impacts.

- An Emergency Action Plan exists for the Plainwell Dam. It should be updated to include the changes associated with coffer dam and Water Control Structure construction and emergency notification chain details.

Ongoing data review

- A copy of all relevant construction documentation should be maintained onsite and made available for periodic review by the agencies.

- All model data (input files, parameter files, select calibration run output, final scenario output, etc.) used for the hydraulic analyses, WCS design, etc. should be provided in native file format on DVD to the agencies for archival purposes. The information should be organized such that any entity, with the properly licensed software, can readily confirm and modify the runs used by BBL for this report for archival purposes.